PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2000-077646

(43) Date of publication of application: 14.03.2000

H01L 27/148 (51)Int.CI. HO4N 5/335

(21)Application number: 10-242301

(71)Applicant: SANYO ELECTRIC CO LTD

(22)Date of filing:

27.08.1998

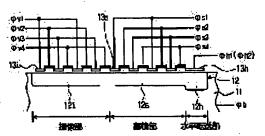
(72)Inventor: OKADA YOSHIHIRO

(54) SOLID-STATE IMAGE PICKUP DEVICE AND ITS DRIVING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To prevent deterioration of the transfer efficiency of information charges from an image sensing part to an accumulating part, in a solid state image sensing element of a frame transfer system.

SOLUTION: In this solid-state image pickup element, a P-type diffusion layer 12 turning to an element region is formed on an Ntype silicon substrate 11, the respective transfer electrodes 13i, 13s, 13h are formed on the diffusion layer 12, and an image sensing part, an accumulating part and a horizontal transfer part are constituted. An image pickup part region 12i and an accumulating part region 12s of the diffusion layer 12 are so formed that impurity concentrations are uniform. A horizontal transfer region 12h is so formed that impurity concentration is higher than that of the image pickup region 12i and that of the accumulating region 12s.



LEGAL STATUS

[Date of request for examination]

29.08.2000

[Date of sending the examiner's decision of

03.12.2002

rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application

converted registration]

[Date of final disposal for application]

[Patent number]

3631000

[Date of registration]

24.12.2004

[Number of appeal against examiner's decision of

rejection]

2002-24805